KOROBOV, Ye., inzh.

Laying roofing felt. Stroitel' no.7:5-6 Jl '58. (MIRA 11:9)
(Roofs) (Bituminous materials)

FEDOROV, A.F.; KOROBOV, Ye.B.; KURSHEVA, N.G.

About the so-called "systoamylase". Ferm. i spirt. prom. 30 no.1: 13-14 '64. (MIRA 17:11)

1. Voronezhskiy tekhnologicheskiy institut.

POPOV, A.N., kand. tekhn. nauk; KOROBOV, Ye.P.; TSIONKOVSKIY, A.L.; PERFILOV, I.F., inzh., red.

[Preparing reinforced concrete pressure pipes by the vibration-pressing method; practices of the Kuybyshev Pipe Plant No.7 of the "Zhelezobeton" Trust] Izgotovlenie zhelezobetonnykh naporrykh trub metodom vibropressovaniia; opyt Kuibyshevskogo trubnogo zavoda No.7 tresta "Zhelezobeton." Moskva, Gosstroiizdat. 1963. 53 p. (MIRA 17:8)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Rukovoditel' laboratorii zhelezobetonnykh trub Nauchno-issledovatel'skogo instituta betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR. (for Popov). 3. Glavnyy inzhener tresta "Zhelezobeton" (for Korobov). 4. Glavnyy inzhener laboratorii zhelezobetonnykh trub Nauchno-issledovatel'skogo instituta betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR (for TSionkovskiy).

KOROBENOK, Ye.V.; TUTAYEV, L.K.

Some subgroups of a projective group in four-dimensional space.
Dokl. AN BSSR 7 no.5:293-297 My '63. (MIRA 16:12)

1. Belorusskiy gosudarstvennyy universitet imeni Lenina.
Predstavleno akademikom AN BSSR N.P. Yeruginym.

KOROBOV, Yu.

Devices for the disassembly and assembly of clutches in the MAZ and IAAZ automobiles. Avt.transp. 35 no.4:31 Ap '57. (MLRA 10:5)
(Automobiles--Clutches)

L 47169-66 EWT(d)/FSS-2

ACC NR: AR6020714 SOURCE CODE: UR/0274/66/000/002/A033/A033

38
B

AUTHOR: Korobov, Yu. F.; Khachaturov, A. I.

TITLE: Effect of strong interference on the input of receiving equipment

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 2A230

REF SOURCE: Tr. Uchebn. in-tov svyazi, vyp. 25, 1965, 19-26

TOPIC TAGS: signal interference, communication, ultrashort wave, frequency modulated transmitter, frequency converter

ABSTRACT: The effect of signal interference of the local frequency-modulated transmitter on the receiving channel has been investigates for combined radio reception and transmission on ultrashort waves. The relative amplification change of a converter cascade, resulting from interference, is designated as the supression coefficient. Its function depends on the errors of measuring antenna noises and on the reduction of useful time of communication in interrupted communication. Theoretical and experimental data on the permissible value of the supression coefficient are presented. Orig. art. has: 3 figures. Bibliography of 2 titles. [Translation of abstract] [NT].

SUB CODE: 17

UDC: 621.391.827

Card 1/1 pb

KOROBOV, Yu.F.

Certain systems for the synchronization of synchronous receivers with straight amplification. Elektrosviaz' 15 no.6:15-21 Je '61. (MIRA 14:6)

(Radio--Receivers and reception)

ACC NR: AP7004249 (A) SOURCE CODE: UR/0106/67/000/001/0031/0036

AUTHOR: Korobov, Yu. F.

ORG: none

TITLE: Traffic capacity of the frequency-telegraphy meteor-burst channel under noise and ionospheric-scatter conditions

SOURCE: Elektrosvyaz', no. 1, 1967, 31-36

TOPIC TAGS: radio telegraphy, telegraph system, meteoric burst communication

ABSTRACT: Potentialities of the meteor-burst frequency-telegraph system are determined by its noise rejection feature and the traffic capacity of the meteor-burst channel operating under noise and ionospheric-scatter conditions. Gaussian noise and Rayleigh distribution of delayed-signal amplitudes are assumed. A formula for the mean statistical error of signal reception is derived. The traffic-carrying capacity of the frequency-telegraph system depends on the instantaneous transmission rate and the parameters α and β of signal-amplitude distribution; the latter vary with time and depend on the path, antenna types and frequency. Formulas and curves of the traffic capacity depending on the above factors are presented. Orig. art. has: 4 figures and 21 formulas.

SUB CODE: 09, 17 / SUBM DATE: 11Jul66 / ORIG REF: 006 / OTH REF: 001

Card 1/1

UDC: 621.396.228.34:621.376.32

S/194/61/000/001/028/038
D216/D304

6,4400

AUTHOR: Korobov, Yu. F.

TITLE: The effect of noise on the synchronization stability of self-oscillators

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 1, 1961, 5, abstract 1 I51 (Tr. Leningr. elektrotekhn. in-ta svyazi, 1959 (1960), no. 7(44), 59-76)

B

TEXT: The effect is studied of sinusoidal, pulse and fluctuating noise on the stability of the phase of a self-oscillator being synchronized by a sine wave. Formulae are given which permit determination of the degree of phase modulation of oscillations due to the above interference; the results of the experiment are also given. The results obtained could, to a certain extent, be used as criteria of interference-killing features in comparing the above method of synchronization with the phased antenna receiving

The effect of noise... S/194/61/000/001/028/038
D216/D304

systems used with synchronous reception in radio communication.

Card 2/2

28786
S/106/61/000/006/002/005
A055/A127

6.4400 (also 1031)

AUTHOR: Korobov, Yu. F.

TITLE: Some synchronization systems for synchronous straight-amplification receivers.

PERIODICAL: Elektrosvyaz', no. 6, 1961, 15 - 21

TEXT: To render possible the practical application of synchronous straight-amplification receivers, it is necessary to develop frequency converters with highly linear characteristics and to work out synchronization systems ensuring a reliable phase-frequency automatic control of the synchronous heterodyne. The first of these two problems has already been dealt with in other publications [Ref. 1: International flavor of progress in electronics, "Electronics", 1960, no. 12; Ref. 2: Barlow, The Application of the Hall Effect in a Semi-Conductor."Proc. IEE," vol. 102, No. 3, 13, 1955.] showing the possibility of using, at radio-frequencies, the frequency converters based upon the Hall effect. The present article is therefore devoted to the study of the performance of phase automatic frequency control systems in synchronous straight-amplification receivers In the well-known automatic phase control systems described by John Costas [Ref.4:

Card 1/9

Some sunchronization systems for .....

Synchronous Communications. "Proc. IRE", 1956, vol. 44], only the symmetrical latsral components are used as synchronizing signal; the carrier is not used at all, which is an essential defect, since the basic power of the AM signal is concentrated in the carrier. In the present article, the author describes two phase automatic frequency control systems, both the carrier and the symmetrical lateral bands of the received station being used as synchronizing signal in System A, and the carrier only in System B. SYSTEM A: - The signals

$$\left.\begin{aligned} u_{sign\ 1} &= U_{sign}(t) \cos (\omega_{sign}\, t + \varphi_{sign}) \\ u_{sign\ 2} &= U_{sign}(t) \sin (\omega_{sign}\, t + \varphi_{sign}) \end{aligned}\right\} \qquad (1)$$

of the received station reach the input of two frequency converters (Converter 1 and Converter 2). The heterodyne voltage (representing, after balanced modulation, an AM oscillation without carrier) is:

$$u_{het} = U_{het} \cos\Omega_{het} t \cos (\omega_{het}\, t + \varphi_{het}) \qquad (2)$$

Card 2/9

Some synchronization systems for ...:

where Ω_{het} is the frequency of the modulated voltage supplied by an a-f oscillator. Assuming that the converter characteristics are linear with respect to the signal voltage and that their steepness varies according to the variation law of the heterodyne voltage and $U_{sign}(t) = U_{0\ sign}\left[1+\sum m_{sign}\cos\left(\Omega_{sign}\,t+\psi_{sign}\right)\right]$, the a-f components of the converter anode currents can be expressed as:

$$\left.\begin{aligned} i_{\Omega_1} &= S_{conv}\,U_{0\ sign}\left[\cos\Omega_{het}\,t+\tfrac{1}{2}\sum m_{sign}\cos\left(\Omega_{sign\ het}\,t+\psi_{sign}\right)\right]\cos\theta \\ i_{\Omega_2} &= S_{conv}\,U_{0\ sign}\left[\cos\Omega_{het}\,t+\tfrac{1}{2}\sum m_{sign}\cos\left(\Omega_{sign\ het}\,t+\psi_{sign}\right)\right]\sin\theta \end{aligned}\right\} \quad (3)$$

where S_{conv} is the converter steepness and $\Omega_{sign\ het} = \Omega_{sign} \pm \Omega_{het}$, $\theta = (\omega_{het} - \omega_{sign})t + \varphi_{het} - \varphi_{sign}$. The converter outputs are connected to a-f filters passing the frequency Ω_{het} and whose band is $\Delta\Omega$. The filters are followed by a-f control circuits. Supposing that the channels are identical, the voltages at the outputs of the a-f control circuits will be:

$$\left.\begin{aligned} u_1 &= Ku_\Omega\cos\theta \\ u_2 &= Ku_\Omega\sin\theta \end{aligned}\right\} \quad (4)$$

Card 3/9

Some synchronization systems for .....

where K is the amplification factor of the converter and of the a-f control circuit, and

$$u_{\Omega} = U_0 \text{ sign } [\cos \Omega_{het}\, t + \tfrac{1}{2}\sum m'_{sign} \cos (\Omega'_{sign\ het}\, t + \psi'_{sign})].$$

Voltages u_1 and u_2 are next applied to a phase detector, where they are rectified and then compared. The difference between the rectified voltages gives the necessary control voltage

$$u_{contr} = KU_0 \ (|\cos\theta| - |\sin\theta|)$$

where U_0 is the direct component formed as a result of the rectification of u_{Ω}. Expanding $\cos\theta$ and $\sin\theta$ into Fourier series and neglecting small magnitudes, the author obtains the following expression for the control voltage:

$$u_{contr} \approx \frac{8K}{3\pi} U_0 \cos 2\theta .$$

The optimum pass-band $\Delta F = \Delta\Omega/2\pi$ of the filters is about equal to 500 cps. The optimum frequency of the a-f heterodyne oscillations is of the order of 1,000 cps.

Card 4/9

Some synchronization systems for ....

Examining the behavior of the automatic phase control system in the presence of selective fadings, the author arrives at the following expression:

$$u_{contr} \approx \frac{8K}{3}\sqrt{U^2_{carrier} + U^2_{lat\ 1} + 2U_{carrier}U_{lat\ 1}\cos\Delta\varphi}\cos 2(\theta_{lat} + \Delta\theta)$$

where

$$\Delta\varphi = \varphi_{carrier} - \varphi_{lat}, \Delta\theta = \operatorname{arctg}\frac{U_{carrier}\sin\varphi}{U_{carrier}\cos\Delta\varphi + U_{lat\ 1}}.$$

In these formulae, $U_{lat\ 1}$ is the amplitude of the smaller lateral component, and $\theta_{lat} = (\omega_{het} - \omega_{sign})t + \varphi_{het} - \varphi_{lat}$. In the described system, the automatic control of the heterodyne is thus effected both by the carrier and by the lateral components of the received signal, which enhances the synchronization stability in the presence of selective fadings. Laboratory experiments have revealed the possibility of the practical use of this system; synchronization by the lateral components only proved, however, insufficiently reliable. SYSTEM B: - When only the carrier is used as synchronizing signal, the phase automatic frequency control system of straight-amplification receivers can also be based upon the principle

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Some synchronization system for ....

of balanced modulation of the synchronous voltage generated by a controlled heterodyne. It is difficult, however, to use, in this case, the well-known phase automatic frequency control systems of superheterodyne receivers. The author describes a synchronization unit which differs from that of System A inasmuch as only one a-f control channel is used here. If signal voltages (1) and (2) are applied to the converter input, the a-f components of the converter anode current are expressed by Equation (3), as in System A. The separation of the converted carrier is effected by a filter with a band of several times 10 cps, tuned on frequency Ω_{het}. The influence of components with frequencies $\Omega_{sign\,het}$ can be neglected, and the voltage at the a-f control circuit output can be expressed as:

$$u_{\Omega} = KU_{0\ sign} \cos\theta \cos\Omega_{het}\, t \qquad (5)$$

To the phase detector input are applied the signal u_{Ω} and the reference voltage (from the a-f oscillator) $u_{0\Omega} = U_{het} \cos\Omega_{het}\, t$. A particular feature of the synchronizing signal must, however, be mentioned here: when $\omega_{het} = \omega_{sign}$ (θ = = const.), this signal represents one oscillation (Ω_{het}), whereas when ω_{het} = $= \omega_{sign} + \Delta\omega$, two oscillations appear ($\Omega_{het} + \Delta\omega$ and $\Omega_{het} - \Delta\omega$). It is necessary

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Some synchronization system for .....

therefore to examine more closely the operation of the phase detector. If the balanced arrangement of Figure 4 is used, the voltages applied to points ac and bc will be respectively:

$$u_{\Omega_1} = u_{0\Omega} + u_{\Omega} = U_{het} (1 + n \cos\theta) \cos\Omega_{het} t$$

and

$$u_{\Omega_2} = u_{0\Omega} - u_{\Omega} = U_{het} (1 - n \cos\theta) \cos\Omega_{het} t$$

where $n = KU_{0\ sign}/U_{het}$. For the normal operation of the phase detector, the load impedance of each diode must be very low for currents with frequency Ω_{het}, and high for the frequency $d\theta/dt$; besides, n must be smaller than one. Under these conditions, the voltage across both halves of the load will be:

$$u_{load\ 1} \approx K_1 U_{het} (1 + n \cos\theta), \quad u_{load\ 2} \approx K_2 U_{het} (1 - n \cos\theta)$$

where K_1 and K_2 are the transmission factors of the detectors. If $K_1 = K_2$, the phase detector output voltage, i.e., the control voltage of the automatic phase

Card 7/9

Some synchronization system for ....

control system will be:

$$u_{contr} = u_{load\ 1} - u_{load\ 2} = 2\ K_1 K U_0\ sign\ \cos\vartheta .$$

In spite of the just mentioned particularity of the synchronizing signal, this system makes it possible to synchronize the controlled heterodyne. An analysis of the noiseproof feature of the described synchronization systems will form the object of a separate article. There are 4 figures, 1 table and 7 references: 4 Soviet-bloc and 3 non-Soviet-bloc. The references to three English language publications read as follows: 1) International flavor of progress in electronics. "Electronics", 1960, no. 12, 2) Barlow. The application of the Hall Effect in a Semi-Conductor. "Proc. IEE.", vol. 102. No. 3, B., 1955; 3) John Costas, Synchronous Communications."Proc. IRE", 1956, vol. 44, No. 12.

SUBMITTED: January 9, 1961

[Abstracter's note: The following subscripts were translated in the formulas and in the texts: с (signal) translated by sign.; г (geterodin) translated by het. (heterodyne), пр (preobrazovatel') translated by conv. (converter); Н (nesushchaya)translated by carrier; б (bokovaya) translated by lat. (lateral); у (upravleniye) translated by contr. (control); Н (nagruzka) translated by load.]

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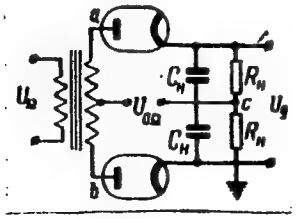
Some synchronization system for ...

Figure 4:



Card 9/9

USSR/Telephones - Apparatus Feb/Mar 1946
Telephones, Public

"Maintenance of the Telephone Pay Station Economy," Yu. M. Korobov, A. I. Vasilevskiy, Engineers of the Moscow City Telephone Network, 1 p

"Vestnik Svyazi - Elektro Svyaz'" No 2/3 (71-72)

Discusses the maintenance of the Moscow public pay phone service, such as the use of special lubricants which would not freeze under temperatures of minus 30 degrees. The Arbat pay phone has a yearly income of 90,000 rubles and has a daily average of 350 users.

19T48

KOROBOV, Yu. M.

PA 20T103

USSR/Telephones - Apparatus Sep 1947
Telephones, Automatic

"New Method of Installing an Individual Control Register in ATS Apparatus," Yu. M. Korobov, L. I. Sagalovich, 5 pp

"Vestnik Svyazi, Elektro-Svyaz'" Vol VII, No 9 (90)

A new method for installing an apparatus for recording waste such as power, energy, etc., on the line of ATS equipment.

20T103

KOROBOV, YU. M.

LUZHETSKIY, N.N.; POSTNOV, I.G.; SEMENOV, A.I.; ZAVARZIN, S.I.; KOROBOV, Yu.M., redaktor; MOROZOVA,T.M., tekhnicheskiy redaktor.

[Line supervisor of city telephone systems] Lineinyi nadsmotrshchik gorodskoi telefonnoi seti. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1951. 394 p. (MLRA 9:1)
(Telephone)

KOROBOV, Yu. M.

"Urgent Problems in the Development of the Urban Telephone Networks," Vest. Svyazi, No. 10, 1952.

Translation M-674, 27 Jul 55

Chief of the Laboratory of the Moscow Urban Telephone Network

KOROBOV, Yu.M.

[Telephone operators in municipal manual exchanges] Telefonistka gorodskoi telefonnoi stantsii ruchnogo obsluzhivaniia. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1953. 100 p. (MLRA 6:9)
(Telephone--Operators' manuals)

LUZHETSKIY, N.N.; POSTNOV, I.G.; SEMENOV, A.I.; ZAVARZIN, S.I.; KOROBOV, Yu.M., redaktor; SOKOLOVA, R.Ya., tekhnicheskiy redaktor.

[City telephone system lineman] Linseinyi nadsmotrshchik gorodskoi telefonnoi seti. 2. izd., ispr. i dop. Moskva, Gos. izd-vo literatury po voprosam sviazi i radio, 1953. 406 p. (MLRA 7:7)
(Telephone)

SHVARTSMAN, Vladimir Osipovich; KULESHOV, V.N., redaktor; KOROBOV, Yu.M. redaktor; MOROZOVA, T.M., tekhnicheskiy redaktor.

[Symmetrization of communications cables] Simmetrirovanie kabelei sviazi. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio. 1954. 37 p. (MLRA 8:8)

(Electric cables)

KOROBOV, Yu.M.

GUMELYA, Anton Nikolayevich; RAMENSKIY, Boris Nikolayevich; LUZHETSKIY, Nikolay Nikolayevich; GUSEV, Simon Stepanovich; KOROBOV, Yu.M., redaktor; SOKOLOVA, R.Ya., tekhnicheskiy redaktor.

[The regional branch telecommunication inspector's manual] Nadsmotrshchik raionnoi kontory sviazi. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1954. 388 p.[Microfilm] (MLRA 8:2)
(Telecommunication)

KOROBOV, Yu. M.

USSR/Miscellaneous - Communications

Card 1/1 : Pub. 133 - 13/20

Authors : Korobov, Yu. M., Engineer

Title : New method of finding couples in sleeves of city telephone-cables

Periodical : Vest. svyazi 7, 30-31, July 1954

Abstract : A new induction method for rapid finding of individual couples in city telephone-cables, is briefly described. The method, developed by one of the laboratories of the Moscow Telephone Network, makes it possible to find the couple in gloves or sleeves of cables by the electrical field around the cores of the couple created by audio-frequency alternating current. The make-up of instruments used in finding couples is described. Drawings.

Institution : ...

Submitted : ...

Korobov, Yu. M.

USSR/Miscellaneous - Telephone

Card 1/1 Pub. 133 - 14/18

Authors : Korobov, Yu. M.

Title : To improve the work of industrial laboratories

Periodical : Vest. svyazi 12, page 26, Dec 1954

Abstract : Suggestions for the improvement of industrial laboratory processes, of postal and telephone offices (maintenance and repair of equipment), are presented.

Institution: The City Telephone Network, Moscow

Submitted : ...

KOROBOV, IU.M.

BRANDT, S.B., kandidat tekhnicheskikh nauk; POKROVSKIY, N.B., kandidat tekhnicheskikh nauk; FINKLER, I.E., inzhener.

Discussion of IU.M.Korobov's article "What a telephone apparatus should be like." S.B.Brandt, I.E.Finkler, N.B.Pokrovskii. Vest. sviazi 14 no.1:28-29 Ja '54. (MLRA 7:5)

1. Nachal'nik laboratorii Ufimskogo zavoda MSSP (for Brandt)
2. Dotsent VKIAS (for Pokrovskiy)

(Telephone--Apparatus and supplies) (Korobov, IU.M.)

KOROBOV, YU.M.

YEGOROV, K.P., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk;
VOSTOKOV, M.N.; NECHAY, F.A.; GURVITS, Sh.F.

Remarks on IU.M.Korobov's article "What a telephone apparatus should be like." Vest.sviazi 14 no.2:30-31 F '54. (MLRA 7:5)

1. Zaveduyushchiy kafedroy LEIS (for Yegorov). 2. Glavnyy inzhener 3-go Glavnogo upravleniya MSSR (for Vostokov). 3. Ispolnyayushchiy obyazannost' inzhenera Kiyevskoy gorodskoy telefonnoy seti (for Nechay). 4. Nachal'nik proizvodstvennoy laboratorii (for Gurvits).
(Korobov, IU.M.) (Telephone--Apparatus and supplies)

KOROBOV, Yu.M.

Improving the work of plant laboratories. Vest sviazi 14 no. 12:26 D '54. (MLRA 8:2)

1. Nachal'nik proizvodstvennoy laboratorii Moskovskoy gorodskoy telefonnoy seti.
(Engineering laboratories)

Korobov, Yuriy Mikhailovich

BELIKOV, Boris Stepanovich; VARSHAVSKIY, Boris Georgiyevich; GUSEV, Simon Stepanovich; KOROBOV, Yuriy Mikhailovich; PAPERNOV, Lev Zakharovich; PETROVSKIY, Stepan Ignat'yevich, [deceased]; YAKUSHEV,M.I., redaktor; PAPINAKO,I.G., redaktor; LEDNEVA, N.V., tekhnicheskiy redaktor

[Postal and telegraph agent] Pochtovo-telegrafnyi agent. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1955. 254 p. (MLRA 9:4)
(Postal service) (Telegraph)

KOROBOV, Yu.M.

Using the method of tagged atoms to detect damaged spots in telephone cable sheathing. Vest.sviazi 15 no.8:10-11 Ag '55. (MLRA 8:12)

1. Nachal'nik proizvodstvennoy laboratorii UMGTS
(Radioisotopes--Industrial applications)

AL'PEROVICH, A.S., inzhener; KOROBOV, Yu.M., inzhener.

Present-day telephone sets. Vest.sviazi 16 no.5:26-27 Je '56.
(MLRA 9:8)

(Telephone--Apparatus and supplies)

VAL'DMAN, Edgar Karlovich; KOROBOV, Yu.M., redaktor; RIMMBERGER, N.V., tekhnicheskiy redaktor

[The telegraph and telephone made interesting] Zanimatel'naia telegrafiia i telefoniia. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1957. 145 p. (MLRA 10:4)
(Telephone) (Telegraph)

KOROBOV, Yuriy Mikhaylovich; LUZHETSKIY, N.N., red.; BERESLAVSKAYA, L.Sh., tekhn.red.

[Electric measurements in municipal telephone systems] Elektricheskie izmereniia na gorodskikh telefonnykh setiakh. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1958. 255 p. (MIRA 12:1)

(Telephone) (Electric measurements)

KOROBOV, Yu.M.

Effect of electric current on the metal-cutting process.
Trudy LPI no.250:86-88 '65. (MIRA 18:9)

KOROBOV, Yu.M., aspirant

Finish turning of the 45G17IU3 low-magnetic steel. Izv. vys. ucheb. zav.; mashinostr. no.8:182-186 '65. (MIRA 18:10)

L 9938-66 EWT(m)/T/EWP(t)/EWP(k)/EWP(b) JD/DJ

ACC NR: AT5028818 SOURCE CODE: UR/2563/65/000/250/0086/0088

AUTHOR: Korobov, Yu. M. 44,55

ORG: Laboratory of Metal Technology, Leningrad Polytechnic Institute (Laboratoriya tekhnologii metallov Leningradskogo politekhnicheskogo instituta) 44,55

TITLE: The effect of electric current on the metal cutting process

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy, no. 250, 1965. Avtomatizatsiya i tekhnologiya mashinostroyeniya (Automation and technology of machinery manufacture), 86-88

TOPIC TAGS: thermal EMF, EMF, metal cutting, metal finishing, metalworking

ABSTRACT: Large temperatures arise in the contact zone of a cutting tool and the worked piece during metalworking operations. This causes the generation of thermal EMF in the cutter-piece thermocouple. With a closed circuit (worked piece-cutter-tool) current passes through the system. The generation of thermal EMF has long been known, but this phenomenon was used mostly for the determination of the cutting temperature by the natural thermocouple method. The Laboratory of Metal Technology, LPI (Laboratoriya tekhnologii metallov LPI) carried out an investigation, the purpose of which was to determine the effect of electric current on the metal cutting process during finishing operations. Weak electrical currents were fed from an external source to the cutting zone. The effect of the interaction of the current introduced (EMF) and the thermal EMF was studied. The effect of electric current

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L 23217-66 EWT(d)/EWT(m)/EWP(k)/EWP(h)/T/EWA(d)/EWP(v)/EWP(t)/EWP(l) IJP(c

ACC NR: AP6013585 JD/MJW SOURCE CODE: UR/0145/65/000/008/0182/0186

AUTHOR: Korobov, Yu. M. (Aspirant)

ORG: none

TITLE: Finishing of low-magnetic steel 45G17Yu3

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 8, 1965, 182-186

TOPIC TAGS: metal finishing, steel, alloy, metalworking machine/45G17Yu3 steel, T15K6 alloy, T30K4 alloy

ABSTRACT: Results described were obtained on a screw cutting machine. Samples used were 150 mm in diameter and 350 to 400 mm long. The best tool materials for finishing low-magnetic steel 45G17Yu3 are hard alloys T15K6 and T30K4. Hard alloy T30K4 is the better at high cutting speeds with a strict SPID system. In the opposite case, alloy T15K6 may be used.

Finishing of 45G17Yu3 steel is best accomplished at cutting speeds of v = 150 to 170 m/min with T30K4, and v = 115 to 130 m/min with T15K6 with a lateral feed of S = 0.056 to 0.1 mm/rev. and cutting depth t = 0.25/mm.

A good coolant to use is a 5% emulsion which helps to increase stability of the cutter (T30K4 by a factor of 1.5 and T15K6 by a factor of 1.7), and improves surface finish of the workpiece.

Two qualitatively different types of tool wear were observed: uniform,

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ACC NR: AP6013585

4

that takes place when finishing falls within the recommended parameters, and wear in which small grooves form on the main and secondary rear surfaces of the cutter. In the latter case, the surface finish is poorer. The magnitude of the wear flat on the rear surface of the cutter, h = 0.3 mm, can be used as the dullness cirterion.

When using quality cutting tips, recommended cutting conditions and tool geometry, and when the SPID system is proper for the process, class 7 surface finish can be achieved as well as high productivity. This paper was presented by Professor V. G. Podporkin, Doctor of Technical Sciences, Leningrad Polytechnic Institute. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 13, 11 / SUBM DATE: 18Jun64

Card 2/2 PB

ACC NR: AT7005728 SOURCE CODE: UR/2563/66/000/267/0089/0092

AUTHOR: Korobov, Yu. M.

ORG: none

TITLE: Investigation of cutting speeds during finish turning

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy. no. 267, 1966. Avtomatizatsiya i tekhnologiya mashinostroyeniya (Automation and technology in the machinery industry), 89-92

TOPIC TAGS: metal cutting, cutting tool, cutting tool forces, nonmagnetic steel/ 45G17Yu3 nonmagnetic steel

ABSTRACT: The expression for the cutting force on the tool bit is written in two parts corresponding to the forces at the leading and trailing edges of the tool bit respectively. Experiments on nonmagnetic steel 45G17Yu3 were performed to determine the effects of longitudinal feed (0.05--0.2 mm/rev) and depth of cut (0.1--0.7 mm) on these two cutting force components and on the tool forces in the other two directions. These forces were measured with a three-directional force gage. The results of these experiments are presented and semi-empirical equations for the cutting forces based on these results are derived as

$$P_z = 220F + 4{,}3L.$$

and

$$P_y = 179F + 8{,}2L;$$
$$R_{xy} = 212F + 7{,}7L,$$

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ACC NR: AT7005728

where F = chip area, L = cutting perimeter, $P_{xy} = \sqrt{P_y^2 + P_x^2}$. It is concluded that feeding rate and depth of cut have major effects on the distribution of cutting forces at the leading or trailing edges of the tool and that both magnitudes and ratios of these quantities are important. For small t and s (finishing cuts), the forces at the trailing edge are predominant. Orig. art. has: 4 figures and 8 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 003

Card 2/2

L 1307-66 EWT(l)/EWT(m)/EWP(w)/EPF(c)/T/EWP(t)/EWP(b)/EWA(c) LJP(c) JD/JW/GG
ACCESSION NR: AP5012550 UR/0181/65/007/005/1402/1412

AUTHOR: Finkel', V. M.; Savel'yev, A. M.; Zuyev, L. B.; Serebryakov, S. V.; Korobov, Yu. M.; Zuyeva, I. B.

TITLE: Interaction of a crack with dislocation boundaries

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1402-1412

TOPIC TAGS: crack propagation, crystal lattice energy, lithium fluoride, crystal imperfection

ABSTRACT: This research was motivated by the lack of published data on the kinetics of interaction between a fast crack and boundaries or subboundaries having different energy levels, or data on the influence of the speed of the crack on the process of overcoming such barriers. There is likewise no information on the time necessary for the crack to break through a subboundary. The authors therefore investigated by polarization-optical and cinematrographic methods the breakthrough of slow and fast cracks through screw and inclined subboundaries with different orientations. The investigations were carried out on rock-salt and lithium-fluoride crystals. Samples measuring 0.3 x 0.6 x 2 cm with initial crack 5--7 mm long were tested with and without annealing. The time intervals necessary for the crack to overcome the boundary and the energy involved in this process were determined experimentally and

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ACCESSION NR: AP5012550

calculated theoretically. The motion of a crack was measured both in air and in an etching solution. Fast crack motion was recorded by two means, photoelectrically and by high speed photography. The methods are briefly described. Crack propagation is stopped by the subboundary for a time ranging from 65×10^{-3} sec to as much as 500×10^{-3} sec, depending on the angle and other factors. In the case of screw boundaries the stopping time did not exceed 16×10^{-6} sec. The relation between the time necessary to break through a subboundary and the energy involved is illustrated in Fig. 1 of the Enclosure, where the continuous curve is the result of theoretical calculations and the horizontal lines are experimental values. The results confirmed the theoretical deduction that much more effort is necessary to push a crack in the etching solution than in air. Orig. art. has: 9 figures and 7 formulas.

ASSOCIATION: Sibirskiy metallurgicheskiy institut im. Sergo Orzhonikidze, Novokuznetsk (Siberian Metallurgical Institute)

SUBMITTED: 01Dec64 ENCL: 01 SUB CODE: SS
NR REF SOV: 004 OTHER: 007

Card 2/2

FINKEL', V.M.; SAVEL'YEV, A.M.; ZUYEV, L.B.; SEREBRYAKOV, S.V.; KOROBOV, Yu.M.; ZUYEVA, I.B.

Interaction between a crack and dislocation boundaries. Fiz. tver. tela 7 no.5:1402-1412 My '65. (MIRA 18:5)

1. Sibirskiy metallurgicheskiy institut imeni Ordzhonikidze, Novokuznetsk.

ACC NR: AT6036593

SOURCE CODE: UR/0000/66/000/000/0224/0225

AUTHOR: Korobova, A. A.; Ratishvili, G. G.

ORG: none

TITLE: Changes in the motor function of athletes under conditions of restricted movement [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 224-225

TOPIC TAGS: hypodynamia, nervous system, human physiology, space physiology, myology

ABSTRACT: The ability to control movement was studied in simple motion models. These models set the task of reaching a goal by a preset program. The goal was to be attained by means of effort developed in various groups of muscles.

The effect of multi-day hypokinesia on the accuracy of execution of move ments according to a preset program was studied in athletes with different muscular activity regimes (weight-lifters and long distance runners); detailed accuracy characteristics of motion were obtained by determining the dynamics of accuracy under conditions of maximal strain (treadmill speed and endurance runs).

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namography), tracing a test line by shifting the center of gravity (...g raphy), the "eye-hand" test, and specific and nonspecific voluntary movements.

Graphic and mathematical analysis of the data obtained from vector dynamography shows that limitations of movement in weight-lifters caused the coefficient of variation (CV) of error in efforts of the upper extremities to increase from 81.0% (before hypokinesia) to 134.8% (following hypokinesia); in runners the change was in the opposite direction, from 74.9% before hypokinesia to 64.9% afterwards.

Muscular effort in the form of treadmill speed and endurance runs increased the coefficient of variation in weight-lifters to 124.6% after hypokinesia. In runners, the coefficient of variation after treadmill runs was 69.8% before hypokinesia, while following the same effort, CV increased to 95.2% after hypokinesia.

In the "eye-hand" tests, multi-day hypokinesia caused little change in the coefficient of variation of weight-lifters (18.3% before hypokinesia and 17.3% afterwards); approximately equivalent changes were seen in runners

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ACC NR: AT6036593

(coefficient of variation was 21.4% before hypokinesia and 20.1% afterwards). During actual hypokinesia, the coefficient of variation increased slightly in both weight-lifters and runners (18.6% in weight-lifters and 22.1% in runners).

were not statistically reliable). A regime of muscular activity and systematic training of the motor apparatus provide better tolerance of extremal

[W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 4/4

ACC NR: AT6036616 SOURCE CODE: UR/0000/66/000/000/0300/0302

9

AUTHOR: Parin, V. V.; Agadzhanyan, N. A.; Kuznetsov, A. G.; Baror, A. S.; Isabayeva, V. A.; Mirrakhimov, M. M.; Davydov, G. A.; Kalinichenko, I. R.; Korobova, A. A.; Karpova, L. I.; Nikulina, G. A.; Tikhomirov, Yo. P.; Sokol, Ye. A.; Gavrilov, B. A.

ORG: none

TITLE: Establishing the possibility of using alpine acclimatization for the preparation and training of cosmonauts [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 300-302

TOPIC TAGS: hypoxia, high altitude physiology, alpine acclimatization, cosmonaut training

ABSTRACT:

Tasks of the present study were to:

1. Conduct complex physiological and clinical investigations during the process of acclimatization at altitudes of 3300 to 4100 m.

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ACC NR: AT6036616

2. Study the influence of alpine acclimatization on human tolerance to extremal spaceflight factors.

3. Study the comparative resistance of alpine inhabitants, valley inhabitants, and alpinists to extremal factors.

4. Develop a system of alpine acclimatization for cosmonauts and issue recommendations on the application of alpine acclimatization for the preparation and training of cosmonauts and on the creation of alpine camps for cosmonauts.

Acclimatization was conducted at the alpine station of the Kirgiz State Medical Institute (Tuya-Ashu mountain pass, altitude, 3300 to 4100 m). A total of 28 male subjects were studied of whom: 11 were indigenous to alpine conditions as farmers of the Tien-Shan--Pamir region (2000 to 2500 m), 11 were valley inhabitants, and 6 were accomplished alpinists. The following indices were studied under alpine conditions and using test stands: Functional condition of the central nervous system; external respiratory and cardiovascular system function; some biochemical indices; the state of the blood coagulation and anticoagulation capacity; and in separate experiments; cerebral circulation using an electroplethysmographic method.

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The experiments showed that after 45 days of alpine acclimatization, human tolerance to prolonged, back-chest accelerations (8 to 10 G) was improved. This was reflected in a relative increase in the amplitude of rheoencephalograms for all subjects and consequently, improved cerebral circulation and lowered pulse rate. EKG changes indicated that the heart was undergoing less strain after alpine acclimatization. After residence in alpine conditions, a decrease in basic metabolic indices and a slight increase in arterial blood oxygen saturation was noted in alpine inhabitants during accelerations.

A study of heat tolerance showed that there was a drop in basic physiological parameters (heat accumulation and basal metabolism) after alpine acclimatization in all three groups. These changes were more pronounced in indigenous alpine inhabitants and less pronounced in alpinists.

The resistance of the organism to hypoxia before and after acclimatization was studied using two approaches; exposure to a certain "altitude ceiling" in a pressure chamber and a method of reverse respiration using a spirograph first filled with atmospheric air. In the latter case as a measure of oxygen consumption, oxygen content under the bell jar of the spirograph decreased and exhaled carbon dioxide was chemically absorbed.

KARCHAGINA, Vera Aleksandrovna; KOROBOVA, A.I., redaktor; SMIRNOV, G.I., tekhnicheskiy redaktor

[Agricultural work of pupils in children's homes; classes 1 and 2] Sel'skokhoziaistvennyi trud vospitannikov detskogo doma; I i II klassy. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1956. 35 p. (MLRA 9:10)
(Gardening)

KOROBOVA, A.I.

TRAS, Rudol'f Aleksandrovich; KOROBOVA, A.I., red.; KOZLOVSKAYA, M.D., tekhn.red.

[School and collective farm; practices of schools in Leningrad Province] Shkola i kolkhoz; iz opyta raboty shkol Leningradskoi oblasti. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1957. 87 p. (MIRA 11:5).
(Agriculture--Study and teaching)

ARTYM, M.I.; MORYGANOV, P.V.; KOROBOVA, A.N.

Investigating the migration of the leuco-compounds of vat dyes.
Izv.vys.ucheb.zav.; tekh.tekst.prom. no.1:110-117 '63. (MIRA 16:4)

1. Ivanovskiy khimiko-tekhnologicheskiy institut.
(Dyes and dyeing—Textile fibers)

AYVAZ'YAN, V.G., prof.; VELIKANOV, A.L., kand. tekhn. nauk; KOROBOVA, D.N., mlad. nauchn. sotr.; FEL'DMAN, M.P., doktor tekhn. nauk; VASIL'YEV, Yu.F., red.

[Selection of power parameters and structural dimensions of hydroelectric power stations] Vybor energeticheskikh parametrov i razmerov sooruzhenii gidroelektrostantsii. Moskva, Nauka, 1965. 135 p. (MIRA 18:4)

1. Moscow. Energeticheskiy institut.

KOROBOVA, E.G., inzhener.

Drills for the BIK-9 machine for boring holes in frozen ground. Prom.energ. 11 no.11:25 N '56. (MLRA 9:12)

(Boring machinery) (Frozen ground)

KOROBOVA, E.G., inzhener.

Metallic cleats for fastening wires to concrete foundations. Prom. energ. 11 no.6:33-34 Je '56. (MLRA 9:9)
(Electric wiring) (Fastenings)

AUTHOR: Korobova, E.G. (Engineer) SOV/94-58-9-13/30

TITLE: The erection of a crossing on a transmission line (Montazh perekhoda liniy elektroperedachi)

PERIODICAL: Promyshlennaya Energetika, 1958, No.9. pp. 29-30 (USSR)

ABSTRACT: A double circuit three-phase transmission line had to be erected over 6 electrified railway tracks and 2 communication lines on the main Chelyabinsk-Moscow line. The railway line could not be shut down for several hours, two periods of 20 minutes, however, could be allowed. During the first period of 20 minutes a rope was slung between the towers and a further long rope was passed over for pulling the cables across. Rollers carrying straps were hung from the rope and whilst the conductor was being strung, a roller and strap were fixed to it every 7 or 8 metres. The conductor could then be pulled across and then the rope could be used again to support other conductors. There are 2 figures.

ASSOCIATION: Uralelektromontazh

1. Transmission lines--Design 2. Transmission lines--Equipment
3. Railroads

Card 1/1

KATS, Mark L'vovich; KOROBOVA, E.I., red.; ALEKSEYEV, P.Z., tekhn.red.

[Luminescence and electron-hole processes in photochemically colored crystals of alkali halide compounds] Liuminestsentsiia i elektronno-dyrochnye protsessy v fotokhimicheski okrashennykh kristallakh shchelochno-galoidnykh soedinenii. Saratov, Izd-vo Saratovskogo univ., 1960. 270 p.

(MIRA 14:2)

(Alkali halide crystals)

PUSHKARENKO, Vasiliy Ivanovich; KONOVALOV, A.S., red.; KOROBOVA, E.S., red.; KHLOBORDOV, V.I., tekhn.red.

[Traffic signs and signals] Dorozhnye signal'nye znaki i ukazateli. Krasnodar, Krasnodarskoe knizhnoe izd-vo, 1961. 146 p. (MIRA 15:3)

(Traffic signs and signals)

PYATKOV, Viktor Anempodistovich; POTAPOVA, Oktyabrina Mikhaylovna; KOROBOVA, E.S., red.; KHLOBORDOV, V.I., tekhn. red.

[Learn to invetn] Uchis' izobretat'. Krasnodar, Krasnodarskoe knizhnoe izd-vo, 1962. 163 p. (MIRA 15:6)
(Technological innovations)

PAVLOVA, Lyudmila Nikiforovna; KOROBOVA, E.S., red.; KHLOBORDOV, V.I., tekhn. red.

[Kuban porcelain] Kubanskii farfor. Krasnodar, Krasnodarskoe knizhnoe izd-vo, 1961. 37 p. (MIRA 16:10)
(Krasnodar--Porcelain)

BELOV, Vladimir Petrovich; KOROBOVA, E.S., red.

[New developments in major construction in the Kuban] Novoe v kapital'nom stroitel'stve na Kubani. Krasnodar, Krasnodarskoe knizhnoe izd-vo, 1963. 43 p. (MIRA 18:1)

1. Zamestitel' nachal'nika Glavnogo upravleniya po stroitel'stvu v rayonakh Severnogo Kavkaza Ministerstva stroitel'stva RSFSR(for Belov).

MEL'CHINSKIY, N.A., SUKHORUKOVA, L.N., ZEVELEVA, Z.A., KOROBOVA, F.M., KADISH, F.M.
BERLIZEVA, K.F., ZLOTNIKOV, Ye.M., BLYUMKINA, M.I.,
VOLOSUNOVA, N.P. LARINA, S.P. YEVDOKIMOVA, L.N.

Professor Aleksandr Vasil'evich Savel'ev; on his 60th birthday.
Vest.oto-rin. 20 no.6:126-127 N-D '58 (MIRA 11:12)
(SAVEL'EV, ALEKSANDR VASIL'EVICH, 1898-)

1. VIL'DFLUSH, R. T.- BRAGIN, A. M.- KALIKINSKIY, A. A. - KOROBOVA, G. YA.

2. USSR (600)

4. White Russia - Soils

7. Effectiveness of granular superphosphate then drilled into seed rows on loamy soils of the White Russian S.S.R. Sov.agron. 11 no. 1, 1953

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

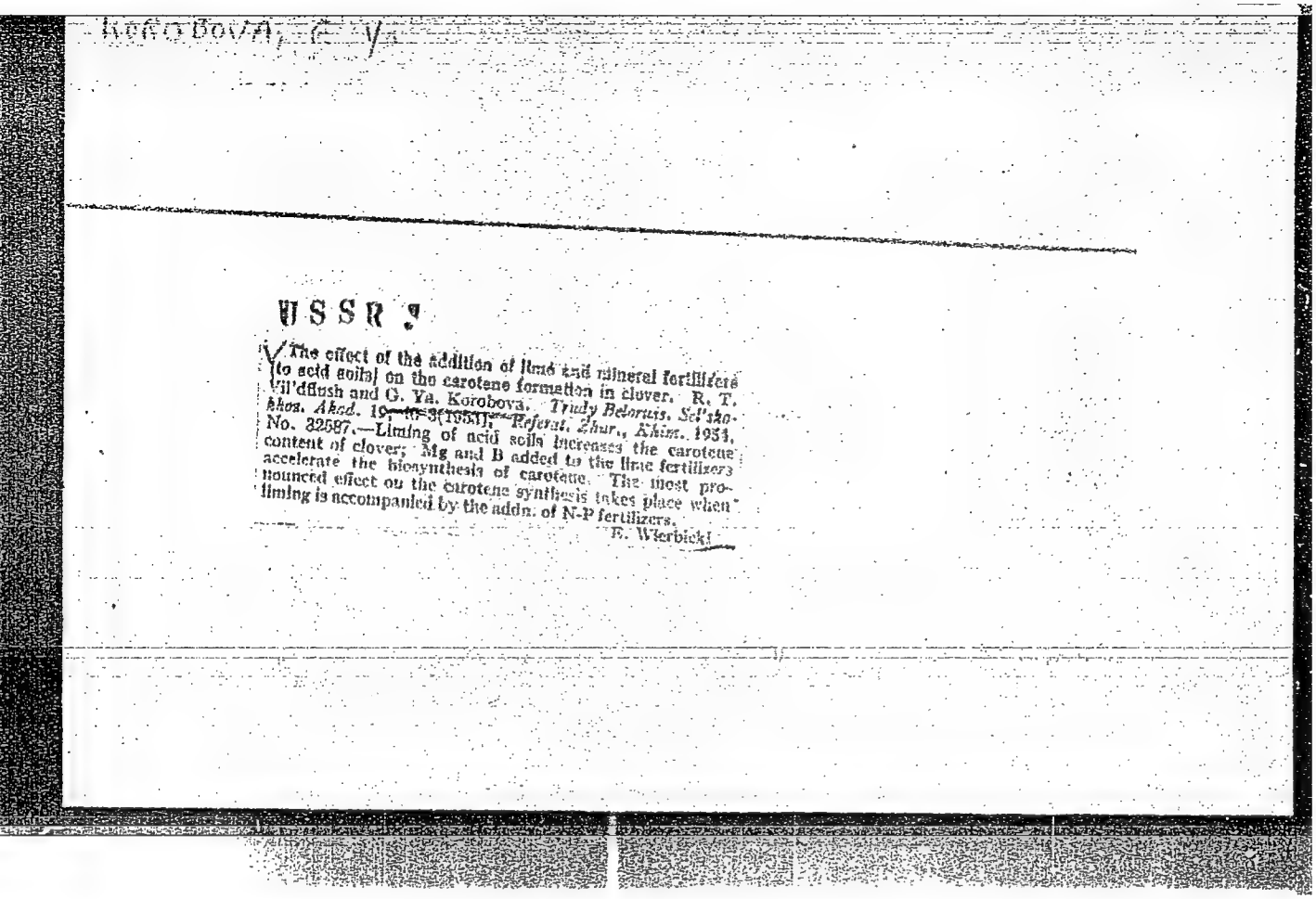
Korobova, G. Ya.

V. Effect of liming and fertilizers on the ascorbic acid contents of plants. R. T. Vil'dflush and G. Ya. Korobova. *Trudy Beloruss. Sel'sko-Khoz. Akad.* 19, 16-22(1953); *Referat. Zhur., Khim.* 1954, No. 37890.—The amt. of ascorbic acid (I) in leaves of spinach grown in vegetative vessels on a peat-podzol soil was increased by liming (52.8 mg. % as compared with 11.9 mg. % for the control). Equally effective was N-P-K-Ca fertilization, while the applications of N-P-K and N-K on a humus-rich podzol soil increased the amt. of I from 31.8 to 37.3 mg. % only. Similar effects were noticed with red clover. The accumulation of I in the leaves is increased when Mg and B are introduced together with lime and fertilizers. In field expts. the effects were noticed also in the second year after fertilization. On relatively less acid soils the addn. of lime can decrease the concn. of I in clover. In water cultures with oat and summer vetch, removal of Mg from the nutrient soln. decreased the amt. of I in the plants; the reverse is true when K and Ca are removed from the soln. Exclusion of N from the nutrient medium was without any effect on the amt. of I in the young seedlings of the vetch, probably owing to a high protein concn. of the vetch seeds; in the oat seedlings the amt. of I was decreased.

E. Wierbicki

AG

(1)



Korobova, E. Ya.

USSR

The effect of the addition of lime and mineral fertilizers [to acid soils] on the carotene formation in clover. R. T. Vil'dflush and G. Ya. Korobova. *Trudy Belorussk. Sel'skokhoz. Akad.* 19— [illegible] (1951). *Referat. Zhur., Khim.* 1954, No. 32587.—Liming of acid soils increases the carotene content of clover; Mg and B added to the lime fertilizers accelerate the biosynthesis of carotene. The most pronounced effect on the carotene synthesis takes place when liming is accompanied by the addn. of N-P fertilizers.

E. Werbicki

VIL'DFLUSH, R.T., doktor sel'khoz. nauk; BRAGIN, A.M., kand. sel'-khoz. nauk; GORBYLEVA, A.I., kand. sel'khoz. nauk; KOROBOVA, G.Ya., kand. sel'khoz. nauk; LARIN, V.D., red.

[Concise manual on mineral fertilizers] Kratkii spravochnik po mineral'nym udobreniiam. Minsk, Urozhai, 1964. 237 p. (MIRA 18:10)

MISHCHENKO, N.M., inzh.; BERDICHEVSKIY, Ye.Ye., inzh.; TERMINOSYAN, N.S., inzh.; KURILOV, A.I., inzh.; POLYAKOV, M.M., inzh.; DEMIDOVICH, Ye.A., inzh.; PINDYURIN, N.I., inzh.; Prinimali uchastiye: MALINOVSKIY, V.G.; MOLCHANOV, I.V.; MASHISHINA, M.P.; YEMCHENKO, Ye.K.; CHEREDNICHENKO, A.A.; STEPANOV, V.A.; SKACHKOV, L.N. [deceased]; KOSHMAN, A.I.; SHCHEKLIN, V.V.; CHUBATYUK, Ye.G.; KHITOVA, Ye.Ye.; KOROBOVA, G.Z.; ROTMISTROVSKIY, B.M.; VEYSBEYN, A.D.

Increasing the efficiency of section tandem mills by the use of repeaters. Stal' 23 no.3:236-241 Mr '63. (MIRA 16:5)

1. Yenakiyevskiy metallurgicheskiy zavod.
(Rolling mills--Equipment and supplies)

KOROBOVA, I. A.

USSR/Metals - Tin, Recovery Dec 51

"Recovery of Tin From Mixed Bronze-Babbit Shavings," I. A. Korobova, Engr, M. L. Pertsovskiy, Cand Tech Sci, Shelyabinsk Polytech Inst

"Litey Proizvod" No 12, pp 6-8

Suggests dissolving of babbit in concd hydrochloric acid and sepn of Sn from soln by cementation with the aid of aluminum. Method permits obtaining separately Sn of 98.5-99.5% purity and bronze of original compn. Disadvantage: about 20% of Sn content in chips is not sepd in pure form but remains chemically combined with Sb and Cu.

203T90

KOROBOVA, I. A.

Korobova, I. A. — "A Turning-less (Shaving-less) Method of Detection and Determination of Phosphorus in Ferroalloys." Min Higher Education USSR, Ural'sk Polytechnic Inst imeni S. M. Kirov, Chair of Analytical Chemistry, Swordlovsk, 1955 (Dissertation for the Degree of Candidate in Chemical Sciences)

SO: Knizhnaya Letopis', No 24, 11 June 1955, Moscow, Pages 91-104

TANANAYEV, N.A.; KOROBOVA, I.A.

Method for determining phosphorus in iron alloys without using shavings. Zav.lab. 22 no.8:916-917 Ag '56. (MLRA 9:11)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova.
(Phosphorus--Analysis) (Iron alloys--Analysis)

KOROBOVA, I A

USSR/Analysis of Inorganic Substances. G-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19615

Author : I. A. Korobova
Inst : Polytechnical Institute of Uralsk
Title : Fractional Reaction of Phosphate Ion.

Orig Pub: Tr. Ural'skogo Politekhn. In-ta, 1956, sb. 57, 137 - 144.

Abstract: It is proposed to use the reaction of composition of ammonium phosphoromolybdanovanadate for the fractional detection of PO_4^{3-}. 1 ml of a mixture of ammonium molybdate (I) and vanadate (II) are added to 2 to 3 ml of the tested solution (0.3 g of II are dissolved in 50 ml of hot water and cooled; 2.5 ml of NHO_3 (1:1) are added, all is

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137-58-4-8686

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 338 (USSR)

AUTHORS: Korobova, I.A., Velichko, N.G.

TITLE: Determination of Total Phosphorus Content in Metallic Granular Zinc (Free of Arsenic) by Chipless Colorimetry [Opredeleniye obshchego soderzhaniya fosfora v metallicheskom granulirovannom tsinke (ne soderzhashchem mysh'yaka) metodom besstruzhkovoy kolorimetrii]

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, Nr 69, pp 137-142

ABSTRACT: In distinction from the method in GOST (standard) 989-41 it is proposed to employ the reaction of ammonium phosphomolybdovanadiate formation with subsequent reduction of the Mo to a blue complex. To perform the analysis, 1 g Zn is dissolved in 8-10 cc HNO_3 (sp. gr. 1.2), and 3-5 drops 0.5% $KMnO_4$ solution are added to the hot solution, whereupon boiling is performed until the solution starts to cloud. Then 1-2 drops of 3% H_2O_2 is added, and the whole transferred to a 10-cc cylinder, while a solution containing $5 \cdot 10^{-7}$ g/cc P is placed in another such cylinder. 1% ammonia and 1-2 drops H_2SO_4 (1:3) are added to both cylinders, and the whole is diluted with water to 2 cc.

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137-58-4-8686

Determination of Total Phosphorus (cont.)

Then 0.1 cc of a mixture of ammonium molybdate and vanadate is added to each. After 5 min, 10 drops of (1:3) H_2SO_4, 3 drops of 1% $SnCl_2$ solution, and 10 drops of saturated CH_3COONa solution are added to each. The colors are then matched by adding water, and the P content is determined. The disagreement with GOST 989-41 was 0.00003% P.

1. Phosphorus--Determination 2. Phosphorus--Colorimetric analysis 3. Ammonium phosphomolybdovanadiate--Chemical reactions

Z.G.

Card 2/2

BALAYEV, Vasiliy Alekseyevich; PISTRAK, R.M., retsenzent; SARKISYAN, S.G., retsenzent; TROFIMUK, A.A., retsenzent; KOROBOVA, I.E., red.; ZENIN, V.V., tekhn. red.

[Devonian sediments in the central and southern regions of the Volga-Ural Province in connection with oil potential. 28 diagrams and maps] Devonskie otlozheniia tsentral'nykh i iuzhnykh raionov Volgo-Ural'skoi provintsii v sviazi s perspektivami ikh neftenosnosti. Saratov, Izd-vo Saratovskogo univ., 1961. 294 p. ___ 28 skhem i kart. (MIRA 15:6)
(Volga-Ural region--Petroleum geology)

Kruglov, A. N.

AUTHORS: Kruglov, A. N., Myzova, S. K., Korobova, I. P. 57-1o-31/33

TITLE: On the Dependence of the Electric Erosion of Metals on Pulse Energy (O zavisimosti elektricheskoy erozii metallov ot energii impul'sa) (Letter to the Editor)

PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 1o, pp. 2421-2422 (USSR)

ABSTRACT: In 1947 B. N. Zolotykh stated that the erosion of metals under the influence of current impulses in a liquid dielectric medium, with otherwise equal conditions, is directly proportional to impulse energy. The experiments, however, showed in a number of cases a deviation from the linear law. The analysis showed that this deviation exceeds toleralbe measuring errors. This is seen especially clear if one of the electrole metals possesses ferromagnetic properties. The authors show that the displacement of the maximum of the curve $\gamma = f_1(t_i)\Big|_{W_P = \text{const}}$ in the case of the increase of impulse in the direction of an increase of the duration of impulse, proves the increasing of the density of the energy reaching the electrode from the channel. This is most abrupt if one of the electrodes is a ferromagnetic material. And just in this case the greatest deviation from the linear dependence of the erosion on the impulse duration occurs. The latter proves the essential influence of the magnetic field of the current on

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the formation and on the measurements of the cathode and anode spots in the case of an impulse discharge of the type investigated (γ - erosion, t_i = duration of impulse, W_P = the energy emitted in the spark gap. There are 1 illustration and 4 Slavic references.

SUBMITTED: March 7, 1957

AVAILABLE: Library of Congress

Card 2/2

PHASE I BOOK EXPLOITATION SOV/5289

Akademiya nauk SSSR. Tsentral'naya nauchno-issledovatel'skaya laboratoriya elektricheskoy obrabotki materialov.

Elektroiskrovaya obrabotka metallov (Electric-Spark Machining of Metals) no. 2. Moscow, Izd-vo AN SSSR, 1950. 262 p. Errata slip inserted. (Series: Its: Trudy) 6,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR.

Resp. Ed.: B. R. Lazarenko; Ed. of Publishing House: S. M. Meyzhes; Tech. Ed.: A. P. Guseva.

PURPOSE: This collection of articles is intended for process engineers and technical and research personnel engaged in the working of metals.

COVERAGE: Problems concerning the most effective application of electric-spark methods in industry are reviewed. Possible future developments in the field of electric-spark machining and its automation are discussed, and, for instance of its present utilization in industry, the technical-economic effectiveness of the process is examined, and the equipment involved is described. The relationship between the parameters of electric-spark pulses and the production characteristics (productivity, machining accuracy, and surface quality) of electric-spark machining is established. An electric-spark method is advanced for the curvilinear cutting of materials with a 20 to 30 micron-thick wire, thus directly producing a finished part. Non-Soviet developments in the field of electric-spark machining are also treated. No personalities are mentioned. There are 121 references: 82 Soviet, 20 English, 10 French, 8 German, and 1 Italian. These references accompany individual articles.

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32196
S/196/61/000/010/034/037
E194/E155

1.1110

AUTHORS: Zolotykh, B.N., and Korobova, I.P.

TITLE: Selection of optimum conditions for electric spark machining of cermets

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1961, 42-43, abstract 10K 244. (Tr. Tsentr. n.-i. labor. elektr. obrabotki materialov AN SSSR, no.2, 1960, 114-119)

TEXT: In a number of articles with a manufacturing slant it has been shown that in some cases a defective layer with a network of microcracks is formed on the surface of hard alloys during electric spark-machining. Investigations of the relationship between the amount of erosion of certain metallo-ceramic compositions and the impulse parameters (duration and energy), and also of the relationship between the nature and amount of defective layer and these parameters, led to the following conclusions. a) For good surface finish without defects the best range of impulse parameters for machining metallo-ceramic alloys is an impulse duration less than 10 microseconds and an

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SHOGAM, S.M.; TOMICHEVA, M.V.; LEZINA, T.A.; SUKHANOVA, Ye.N.; KOROBOVA, I.V.; MAKHNEV, Yu.A.

Introducing the kinetic method of determining gamma-isomers of hexachlorocyclohexane in dusts of hexachlorocyclohexane. [Trudy] NIUIF no.165:52-62 '59. (MIRA 13:8)

1. Predpriyatiye khimicheskoy promyshlennosti.
(Cyclohexane)

KOROBOVA, K.I., SHAROV, M.G.; SHVETS, A.V.

Introducing the manufacture of percale on automatic looms.
Tekst. prom. 24 no.2:32-33 F '64. (MIRA 17:3)

1. Glavnyy inzh. Novo-Tkatskoy fabriki Glukhovskogo khlopchatobumazhnogo kombinata (for Korobova). 2. Zaveduyushchiy tkatskim proizvodstvom Novo-Tkatskoy fabriki Glukhovskogo khlopchatobumazhnogo kombinata (for Sharov). 3. Nachal'nik tkatskogo tsekha Novo-Tkatskoy fabriki Glukhovskogo khlopchatobumazhnogo kombinata (for Shvets).

L 07129-67
ACC NR: AM7001060 SOURCE CODE: UR/9012/66/000/147/0002/0002

AUTHOR: Korobova, L. (News correspondent) 17
8

ORG: none

TITLE: Tunnels of Nurek

SOURCE: Pravda, 27May66, p. 2, col. 5-8

TOPIC TAGS: hydroelectric power plant, civil engineering

ABSTRACT: At Nurek, the river Vakhsh has been diverted through a 1,628-meter tunnel, bypassing a narrow canyon. A second tunnel is under construction on the opposite bank. When the third and fourth tunnels are constructed, the first will be plugged with concrete. The entire construction is part of the construction of a hydroelectric station, but will include an overflow tunnel capable of carrying water beyond the station in case of a flood with a magnitude so great that the theory of probability indicates it should occur only one time in 10,000 years. [JPRS: 36,501]

SUB CODE: 13, 10 / SUBM DATE: none

Card 1/1 LC

IVANOV, P.K., prof.; KOROBOVA, L.I., kand. sel'khoz. nauk; LEONOVA, T.S., red.; LEVINA, L.G., tekhn. red.

[Windbreak strips in the control of drought and sirocco-like winds] Kulisnye posevy v bor'be s zasukhoi i sukhoveiami. Moskva, Izd-vo M-va sel'. khoz., 1960. 21 p. (MIRA 14:12)
(Windbreaks, shelterbelts, etc.)

IVANOV, P.K., doktor sel'skokhozyaystvennykh nauk; KOROBOVA, L.I., kand. sel'skokhozyaystvennykh nauk

Strip cropping to control drought and dry winds. Zemledelie 6 no.4:29-33 Ap '58. (MIRA 11:4)
(Strip cropping)

LIVSHITS, I.A.; KOROBOVA, L.M.

Polymerization of 2-ethyl-1, 3-butadiene. Vysokom.soed. 3 no.6: 891-897 Je '61. (MIRA 14:6)

1. Nauchno-issledovatel'skiy institut sinteticheskogo kauchuka.
(Butadiene) (Polymerization)

LIVSHITS, I.A.; REYKH, V.N.; KOROBOVA, L.M.; MIRONYUK, V.P.; NERUSH, K.U.; STEPANOVA, V.I.

Copolymers of ethylene and propylene containing unsaturated bonds. Kauch. i rez. 24 no.11:3-5 '65. (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka imeni S.V. Lebedeva.

AUTHORS: Livshits, I. A., Korobova, L. M. SOV/20-121-3-22/47

TITLE: Polymerization of Higher Diolefines (Polimerizatsiya vysshikh diyenovykh uglevodorodov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 3, pp. 474-476 (USSR)

ABSTRACT: In recent years in the USSR and the USA (SShA) isoprene polymers were synthesized which are closer to natural rubber then other types of artificial rubber that had been known up to that time (Refs 1-5). It was necessary to clarify inhowfar the high stability connected with a high elasticity which characterizes vulcanizates of natural rubber is a characteristic feature of the polymers of other diolefines. For this purpose polymers of a) 2-methyl pentadiene-1,3, of b) 2-ethyl butadiene-1,3 and of c) 2-isopropyl butadiene-1,3 were synthesized. The formation of monomers is briefly described (Refs 6, 7, 8) and their constants are mentioned. Metallic lithium was used for the polymerization. The reaction took place at 50-100°. It was carried out to a degree of 90-100 %. According to table 1 the polymerization of the monomers b) and c) proceeds

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Polymerization of Higher Diolefines

SOV/20-121-3-22/47

PRESENTED: March 24, 1958, by V. A. Kargin, Member, Academy of Sciences, USSR

SUBMITTED: March 22, 1958

Card 3/3

(A) L 30704-66 EWT(m)/EWP(j)/T RPL RM/WW

ACC NR: AP5028898 SOURCE CODE: UR/0138/65/000/011/0003/0005

AUTHOR: Livshits, I. A.; Reykh, V. N.; Korobova, L. M.; Mironyuk, V. P.; Nerush, K. U.; Stepanova, V. I.

ORG: All-Union Scientific Research Institute of Synthetic Rubber im. S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)

TITLE: Ethylene-propylene copolymers containing unsaturated bonds

SOURCE: Kauchuk i rezina, no. 11, 1965, 3-5

TOPIC TAGS: ethylene, propylene, copolymer, vulcanization

ABSTRACT: The article describes the physicomechanical properties of the SKEPT-1 copolymers, which are ternary copolymers of ethylene, propylene, and an unconjugated diene, and have a small quantity of double bonds. The influence of vulcanization time and degree of unsaturation of copolymers, fillers, and Defo toughness on the physicomechanical properties of SKEPT-1 vulcanizates was studied. The properties depend on the composition of the copolymers: as the content of propylene linkages rises from 35 to 41 mole %, the tensile strength and elasticity of the vulcanizates decrease. Because of the valuable physicomechanical properties of their black-extended vulcanizates, the SKEPT-1 copolymers are of great interest for practical applications in the rubber, tire, and other industries. Orig. art. has: 2 figures and 3 tables.

SUB CODE: 07, 11 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 004

UDC: 678.762.2-139.004.12

Card 1/1 LS

23771

S/190/61/003/006/014/019
B110/B208

11.2211 also 2209

AUTHORS: Livshits, I. A., Korobova, L. M.

TITLE: Polymerization of 2-ethyl butadiene-1,3

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 6, 1961, 891 - 897

TEXT: The present study deals with the influence of some initiators on rate and properties of polyethyl butadienes, and with the effect of the polymerization temperature on their structure and properties. The monomer freed from oxygen traces was kept over lithium butyl at -20°C for 20 min and then polymerized in hexane (ratio hexane/monomers = 80/20 parts by volume) at 0, 20, 50 and 100°C. When studying the influence of the polymerization temperature upon the polymer properties the ratio lithium butyl / monomer = 1 : 1000, when testing the physico - mechanical characteristics, 1 : 4000. The following was determined: 1) intrinsic viscosity at 25°C in benzene by Ostwald viscosimeter; 2) molecular

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Polymerization of ...

S/190/61/003/006/014/019
B110/B208

weight by means of a ~5 ml glass osmometer with a diaphragm of denitrated nitrocellulose (pore size 1.53 - 2.7 mμ) and benzene as solvent according to: $M = RT/(P/c)_{c \to 0}$; 5) unsaturatedness of the polymers according to T. M. Kolthoff and T. S. Lee (Ref. 6: J. Polymer Sci., 3, 66, 1948); 4) the number of links bound in 1,2 and 3,4 position was determined from the number of —— $CH=CH_2$ and $-CR=CH_2$ groups according to M. P. Burgova, A. N. Korotkov (Ref. 7: Izv. AN SSSR, ser. fiz., 14, 452, 1950). 2-ethyl butadiene-1,3 was polymerized in the vapor phase with a catalyst mixture with dispersed lithium, in hexane solution with lithium butyl and dilithium isoprene (first synthesized by G. N. Petrov) as initiator (Table 1). Figs. 1 a and 6 show the reaction rate at a ratio of the monomer: Li catalyst = 4,000 : 1. The physico-mechanical characteristics were studied on microsamples. The unfilled vulcanization mixture was prepared according to the formula for polyisoprene (Ref. 8: S.S. Subbotin, V. V. Samoletova, A. K. Znamenskaya: Khimich. prom-st, 1956, no. 7, 21). According to Table 1, the physico - mechanical properties are not changed by a

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slight increase of the length of the alkyl radical (from CH_3 to C_2H_5), higher increase (to C_4H_9) decreases the strength of unfilled mixtures. According to Table 2, a termperature rise from 0 to 100°C only little affects intrinsic viscosity and molecular weight. Temperature fall from 100°C to 0°C prolongs the reaction time from some minutes to 120 hr. The rubbers were quantitatively tested by means of the absorption band 6114 cm^{-1} (vinyl band), using a diffraction grating with 600 lines/mm. The sum of the links in 1,2 and 3,4 position was determined by means of infrared spectroscopy in the range of C-H vibrations in the first overtone. According to Table 3 a rise of the polymerization temperature of 2-ethyl butadiene-1,3 in the presence of lithium butyl in hexane from 0 to 100°C nearly doubles the links. Similar conditions are found in the polymerization of isoprene and 2-butyl butadiene-1,3. The same rule applies to different methods of polymerization: Increase of the number of links with rise in temperature. The spectra of polyethyl budadiene obtained on /KC-11 (IKS-11) spectrograph disclosed that the polymers obtained by

polymerization of 2-ethyl butadiene-1,3 with lithium butyl contain no links bound in 1,2 position. There are 2 figures, 4 tables and 13 references: 7 Soviet-bloc and 6 non-Soviet-bloc The three most recent references to English-language publications read as follows: Ref. 9: C. S. Marvel, L. R. Williams, H. E. Baumgarten, J. Polymer Sci., 4,583, 1949. Ref. 12: R. S. Stearns, L. E. Forman, J. Polymer Sci., 41, 381, 1959, Ref 13: I. Kuntz, A. Gerber, J. Polymer Sci., 42, 299, 1960.

ASSOCIATION: Nauchno-issledovatel'skiy institut sinteticheskogo kautchuka (Scientific Research Institute of Synthetic Rubber)

SUBMITTED: August 4, 1960

KOKOBOVA, L.M.; LIVSHITS, I.A.

2-n-Butyl- and 2-n-propyl-1,3-butadienes. Zhur. ob. khim. 34 no. 10:3419-3421 O '64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka imeni S.V. Lebedeva.

KOROBOVA, L. S.

Dissertation defended for the degree of Candidate of Philological Sciences at the Institute of Linguistics

"Observations on Sentence Structure in the German Language at the Beginning of the XVI Century(From Materials of the Works of Thomas Muncher)."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

L 30985-66 EWT(m)/EWP(j)/T RPL WW/JW/JWD/WE/GS/RM

ACC NR: AT6004591 SOURCE CODE: UR/0000/65/000/000/0166/0172

AUTHOR: Il'in, V. K.; Korobova, M. N.; Finyagin, A. P.; Shakhov, Ye. A.

ORG: none

TITLE: Combustion of fuels containing organic phosphorus compounds

SOURCE: AN SSSR. Institut goryuchikh iskopayemykh. Novyye metody szhiganiya topliv i voprosy teorii goreniya (New methods in the combustion of fuels and problems in the theory of combustion). Moscow, Izd-vo Nauka, 1965, 166-172

TOPIC TAGS: combustion, phosphorus, phosphorus compound

ABSTRACT: The conditions were studied under which the combustion of a hydrocarbon fuel containing an organic phosphorus compound yields a maximum of P_4O_{10}. The experiments were conducted by analyzing the combustion products obtained with a hydrocarbon fuel containing either 9 or 30% phosphoric acid ester. A combustion chamber equipped with a fuel atomizer and a scrubber for the retention of combustion products was used. The experiments showed that the highest yield is obtained at an air excess factor of 1.2—1.5. The thermodynamics of reactions at various temperatures are discussed. The experiments are of interest for the combustion of compounds containing phosphorus and for the new methods used in phosphoric acid production. Orig art. has: 3 figures.

[PV]

SUB CODE: 21 / SUBM DATE: 09Sep65/ ORIG REF: 004/ OTH REF: 003/ ATD PRESS: 4191

Card 1/1

POKROVSKAYA, Ye., arkhitektor; KOROBOVA, M., arkhitektor

New types of storehouses for potatoes, fruits and vegetables.
Ekspor. proekt. no.5329-34 '62. (MIRA 18:9)

KOROBOVA, N., inzh.

Universal storehouse for vegetables and fruit. Sel'. stroi. no.10:12-13 O '62. (MIRA 15:11)
(Vegetables—Storage) (Fruit—Storage)

LAPOTYSHKIN, N.M.; KOROBOVA, N.A.; BARANOVA, N.A.

Properties of high silicon electrical steel prepared by continuous casting. Biul. TSIICHM no.2:42-44 '61. (MIRA 14:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Lapotyshkin, Korobova). 2. Ural'skiy institut chernykh metallov (for Baranova).
(Steel--Electric properties)

LAPOTYSHKIN, N.M., kand.tekhn.nauk; MIRONOV, L.V., kand.tekhn.nauk; KOROBOVA, N.A., inzh.; BARANOVA, N.A., inzh.; BELYAKOV, A.I., inzh.

Structure of cold-rolled transformer steel. Metalloved. i term. obr. met. no.12:26-29 D '62. (MIRA 16:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii, Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov i Novosibirskiy metallurgicheskiy zavod.
(Steel--Magnetic properties)

ITSKOVICH, G.M.; NIKOLAYEV, N.A.; AKIMOVA, Ye.I.; KOROBOVA, N.A.; PRAVDINA, T.E.; KAMYSHEVA, L.P.

Characteristics of continuous transformer steel ingots. Stal' 23 no.7: 643-648 Jl '63. (MIRA 16:9)
(Steel ingots) (Continuous casting)

ORKIN, Grigoriy Aleksandrovich; MYAGKOV, M.M., red.; KOROBOVA, N.D., tekhn. red.

[Control of volunteers over the work of public dining rooms] Obshchestvennyi kontrol' za rabotoi stolovykh. Moskva, Profizdat, 1963. 77 p. (Bibliotechka profsoiuznogo aktivista, no.11(59)) (MIRA 16:10)
(Trade unions--Officers) (Restaurant management)

KOROBOVA, N.F.

ELLERN, S.S. (Kazan'); TROYEPOL'SKIY, V.I. (Kazan'); MURAV'YEV, I.S. (Kazan'); IVANOV, Ye.Ye. (Kazan'); KOROBOVA, N.F. (Kazan'); MALYSHEVA, O.N. (Kazan'); CHURINA, N.P. (Kazan')

Stratigraphy and facies structure of the Devonian in the Tatar A.S.S.R. Uch.zap.Kaz.un. 115 no.10:85-88 '55. (MLRA 10:5)
(Tatar A.S.S.R.--Geology, Stratigraphic)